Biology Committee Conference Call Tuesday, October 23 10:00 am to 12 noon

Attendees: Gerry Roehm, Pat Nelson, George Smith, Tom Czapla, Paul Dey, Tim Modde, Tom Chart, John Carron, John Hawkins, Bill Davis, Chuck McAda, Ron Brunson, Mark Wieringa, Mike Hudson, Amy Cutler, David Truman, Tom Pitts, Brent Uilenberg.

1. Review of scopes of work to evaluate escapement from Elkhead and Starvation reservoirs

Starvation Scope of Work:

Dam operators do not want anything placed in the chutes; spillway is probably not a very safe place for sampling; Dam Operation Policy - nothing in the chutes or the spillway that would impact flow. The stilling basin below the spillway is too deep (60 feet) to effectively sample. Using the stilling basin would require lines to pull nets up, which would be difficult. If there is no feasible way to sample in chutes or off dam, could a blocking net be placed in the stream below the stilling basin to prevent migration into or out of the stilling basin during runoff? If so, the stilling basin could be drained before runoff and again after runoff to determine how many fish had escaped from the reservoir. >Tom Chart to contact operators for any flexibility in chute policy to allow for sampling. >Ron Brunson to contact Gordon Mueller for how they sampled off Aspinall Unit dams.

John Hawkins had concerns about the evaluation, specifically what is the level of escapement considered to be a problem and what is the minimum size of fish we should be sampling. The latter will dictate the type and mesh size of sampling gear to be used. John wants to make sure that sampling and subsequent data analysis adequately addresses our needs. We should identify those life stages (i.e., sizes) to be captured and select gear and develop sampling protocols accordingly. It isn't necessary to sample for eggs and larvae, but juveniles should be collected. Encourage Ron to sample with a variety of gear to capture as many sizes as possible. >Ron will modify the scope of work based on information from dam operators and Mueller modifying methodologies as necessary to achieve, as closely as possible, the original objectives of the study. Information should be received within the week and will be posted to the listserver.

Elkhead Scope of Work:

Mark Wieringa wanted to know what happens to fish that are collected; Gerry responded that they will probably go back into the reservoir, but they definitely would not be released into the river. However, scope of work must be specific in this regard; fish captured below the dam should be marked and released back into the reservoir. Chart questioned if channel catfish were to be included in translocations from the river to the reservoir. With regard to the variance to the NNSP requested by CDOW, the Service

agreed only to translocating smallmouth bass and channel catfish from the Yampa River into Elkhead Reservoir but had significant reservations about translocating northern pike or channel catfish to the reservoir. However, catfish could be translocated from the Yampa River upstream from DNM to Kenney Reservoir, and Modde would continue lethal removal of catfish from DNM.

There was a lengthy discussion of the study objectives. Objective 1 should be rewritten as follows: "Quantify escapement of nonnative fishes from Elkhead Reservoir by species and size." This study is not designed to determine whether the numbers and sizes of nonnatives escaping from Elkhead are "of concern to native fishes." This should be determined separately. For the same reason, this study cannot determine if screening is necessary (Objective 2), since that decision ultimately would be based on a determination of potential impacts to native species due to escapement of nonnatives from Elkhead. However, Bill Miller may render an opinion as to the need for screening to provide guidance to the decision-makers. Mike Hudson does not want to lose Objective 3, because assessing escapement of translocated fish was a condition of the NNSP variance. Translocated fish would be marked to differentiate them from fish already resident in the reservoir. If the number of marked fish captured below the dam exceeds a predetermined threshold, further translocation activities would be discontinued.

VI. A couple of sentences are needed to explain how the probability of the escapement will be determined. Under expected results #2, suggest what guidelines could be used for screening and numbers allowed to escape. > Pat/Gerry will work with Nesler/Miller to make needed revisions; BC does not need to see again before final.

2. Discussion of whether to continue with Phase II of the Gunnison temperature work.

Question was whether to proceed with Phase II on the Gunnison temperature work. Gerry: Colorado is not present on call but had legitimate concerns about proceeding with Phase II before uncertainties about NPS water rights and FWS flow recommendations were resolved. John Carron: For purposes of building and calibrating the model, historical data would be used and would not be impacted by forecasting under new operations/scenarios. If the Recovery Program does not develop this tool now, the Program will not have it available when developing future flow recommendations. Mark Wieringa: it seems that there is limited capacity to modify temperatures by modifying flows. That was the conclusion of the Phase I report. Water temperatures reach equilibrium farther upstream at low flows and farther downstream (below Delta) at higher flows. Moreover, even during spring runoff, when North Fork and Uncompahgre flows are high, releases from Crystal have a significant impact on temperature. Phase II would focus on other options (i.e., temperature control devices) to increase temperatures.

Brent Uilenberg had concern of using proprietary models and that Phase II should be done in-house. Gerry stipulated that because the Recovery Program is funding this effort, any model produced in Phase II would become the "property" of the Program. Bill Davis

was concerned that we not go too far without Colorado's input. Gerry remarked that the only commitment being made is that Amy Cutler and John Carron revise their scopes of work for discussion and approval at the next Biology Committee meeting (December 4-5, 2001). No commitment will be made until the committee approves a final scope of work. Tom Pitts commented that the question of temperature control will not go away, so we should proceed with the work. The ultimate decision whether to implement temperature control will be based on weighing the benefits against the costs. Bill Davis abstained, and the rest of committee present supported going forward with revised scopes of work. >Amy Cutler and John Carron will submit separate scopes or collaborate on a combined scope of work. Gerry will coordinate. Scope(s) will be submitted to the Committee at least 10 calendar days prior to the December 4 meeting (NLT Friday, November 23). The models will be proprietary to the Program and scope(s) of work will be revised to reflect that.

3. Discussion of stocking plans.

Bonytail survival estimates on survival are similar to plans. Consistency in razorback sucker stocked are in question and how survival estimates are applied. > Mike will adjust tables 1 and 2 in the Utah plan. Total number of razorback suckers to be stocked will 16,440 in two river reaches. Czapla commented that Colorado plan should place text citations in chronologic order.